

What is claimed is:

1. An ultrasonic motor comprising:

a vibrating body in a quadrilateral plate form having a piezoelectric element,

a protrusion provided on the vibrating body, and

a moving body in contact with the protrusion and driven by this,

the piezoelectric element being characterized to cause a vibration wave having a node on a diagonal line of the vibrating body; and

the protrusion being provided in a position off the node.

2. An ultrasonic motor comprising:

a vibrating body in a quadrilateral plate form having a piezoelectric element,

a protrusion provided on the vibrating body, and

a moving body in contact with the protrusion and driven by this,

the piezoelectric element being characterized to cause a vibration wave having a node on a line connecting between a center of a first side of the vibrating body and a center of a second side opposed to the first side; and

the protrusion being provided in a position off the node.

3. The ultrasonic motor according to claim 1 or 2:

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wherein the protrusion is two in number, and the protrusions being provided in positions of point symmetry about a center of the vibrating body as reference.

4. The ultrasonic motor according to claim 2:

wherein the protrusion is provided on a diagonal line of the vibrating body.

5. The ultrasonic motor according to claim 1:

wherein the protrusion exists on a line connecting between a center of a first side of the vibrating body and a center of a second side opposed to the first side.

6. The ultrasonic motor according to claim 1 or 2:

wherein a center portion of the vibrating body is supported.

7. The ultrasonic motor according to claim 1:

wherein one diagonal line of the vibrating body is supported.

8. The ultrasonic motor according to claim 1:

wherein at least two corners on at least one diagonal line on the vibrating body are supported.

9. The ultrasonic motor according to claim 2:

wherein support is on a line connecting between a center of a first side on the vibrating body and a center of a second side opposed to the first side.

10. The ultrasonic motor according to claim 2:

wherein support is at a center of a first side on the

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vibrating body and a center of a second side opposed to the first side.

11. The ultrasonic motor according to claim 1 or 2:

wherein a groove is in a portion of the vibrating body corresponding to the node.

12. The ultrasonic motor according to claim 1:

wherein the piezoelectric element has four electrode portions divided by two diagonal lines of the vibrating body, and a drive signal being applied to two electrodes of them to thereby drive the vibrating body.

13. The ultrasonic motor according to claim 2:

wherein the piezoelectric element has four electrodes divided by regions due to connecting center points of sides of the vibrating body, and a drive signal being applied to two electrodes of them to thereby drive the vibrating body.

14. A piezoelectric driving body having a vibrating body in a plate form and a piezoelectric element bonded on the vibrating body and having a plurality of electrodes,

the piezoelectric driving body being characterized in that polarizing directions of the piezoelectric element having a plurality of electrodes are all in a same direction.

15. The ultrasonic motor according to claim 1, wherein the piezoelectric element has four electrode portions divided by two diagonal lines of the vibrating body, and drive signals different in phase by 180 degrees being applied to two

electrodes of them and remaining two electrodes to thereby drive the vibrating body.

16. The ultrasonic motor according to claim 2, wherein the piezoelectric element has four electrodes divided by regions due to connecting center points of sides of the vibrating body, and drive signals different in phase by 180 degrees being applied to two electrodes of them and remaining two electrodes to thereby drive the vibrating body.

17. An ultrasonic motor comprising a vibrating body having a piezoelectric element, a moving body to be driven by vibration of the vibrating body, and a pressure-applying body for providing contact pressure to between the vibrating body and the moving body,

the ultrasonic motor being characterized in that the pressure-applying body becomes a guide for rotation of the moving body.

18. An electronic apparatus being characterized by having an ultrasonic motor or a piezoelectric driving body according to claims 1 to 17.

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